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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/893,192	06/27/2001	Ismail K. Labeeb	MNI010001	3912

24498 7590 04/13/2011

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EXAMINER	
PARRA, OMAR S	

ART UNIT	PAPER NUMBER
2421	

MAIL DATE	DELIVERY MODE
04/13/2011	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/893,192	LABEEB ET AL.	
	Examiner	Art Unit	
	OMAR PARRA	2421	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 January 2011*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20,22,23 and 26-29* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20, 22, 23 and 26-29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Appeal Brief

1. In view of the Appeal Brief filed on 01/24/2011, PROSECUTION IS HEREBY REOPENED. A new ground of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

/William Trost/

Supervisory Patent Examiner, Art Unit 2421

Response to Arguments

2. Applicant's arguments with respect to claims **1-20, 22, 23 and 26-29** have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims **1-20, 22, 23, 26 and 27** are rejected under 35 U.S.C. 103(a) as being unpatentable over Zigmond et al. (hereinafter 'Zigmond', Patent No. 6,698,020, of record) in view of Schaffer (Patent No. 7,051,352, of record) in further view of Herz (Patent No. 6,029,195).

Regarding claims 1 and 14, Zigmond teaches a method for displaying a TV program to a viewer, comprising:

transmitting/receiving a plurality of TV programs, wherein at least some of the received TV programs compete with at least some others of the received TV programs for viewership; allowing the viewer to select one of the plurality of received TV programs for viewing; transmitting a plurality of additional programs (col. 7 lines 13-36);

storing data indicative of the viewer selected TV program and data indicative of at least some others of the TV programs competing with the viewer selected TV program; determining viewing preferences using the stored data indicative of the user selected TV program and data indicative of at least some others of the TV programs

competing with the viewer selected TV program, as well as one or more known program traits (col. 11 lines 11-30; col. 13 lines 5-28, where the EPG description of the programs help to identify the 'type' of user preferred programs).

controlling the programming displayed to the viewer in accordance with the viewer selection and the determined viewing preferences (Fig. 6; col. 17 lines 10-50; col. 6 lines 6-9).

On the other hand, Zigmond does not explicitly teach storing data indicative of TV programs that were not selected along with data indicative of the viewer selected TV programs and determining viewing preferences using both indicative data.

However, in an analogous art, Schaffer teaches a system and method for adaptively recommending content to a viewer where record is kept or stored of what programs have been watched and total or sample of programs not watched (Fig. 3, col. 2 lines 38-67; col. 3 lines 28-42). Furthermore, Schaffer uses this viewing history (programs watched/not-watched and the characteristics they contain) to calculate or determine viewing preferences (Figs. 6 A-C, col. 4 line 20-col. 5 line 19).

Therefore, it would have been obvious to an ordinary skilled in the art at the time of the invention to have modified Zigmond's invention with Schaffer's feature of storing data indicative of non-selected TV programs and determine viewing preferences using this data along with data indicative of selected programs for the benefit of having a more close user's viewing preferences determination by *'differentiating between the features of shows that are liked and those that are not liked…',* Schaffer, col. 2 lines 54-59.

Additionally, Zigmond and Schaffer do not explicitly teach using one or more known program traits and one or more associated program traits, the associated program traits being combined with other known program traits so as to generate new program traits representative of said viewer's degree of preference of a program according to a regression analysis of the viewing habits of the particular viewer over time to control the program displayed to the viewer.

However, in an analogous art, Herz teaches a system for customized electronic identification of desirable objects that automatically creates both a target profile (profile of the media object) and a user profile (target profile interest, which is the user's interest level on different types of media objects). Using both profiles, the system creates a ordered list of media objects from which the user can select content (At least title; abstract; col. 4 lines 36-47). Herz teaches that the objects to be selected using matching the profile of the objects and the user profile's, can be movies to be watched, a news story of potential to be read, in item to buy, etc (col. 6 lines 16-58). The object profile is composed by three types of attributes: numeric, textual and associative attributes (col. 6 lines 16-58; col. 10 line 29-col. 11 line 49). Numeric and textual attributes are known characteristics of a given content (i.e. title, ratings, release date, etc; col. 11 lines 8-25) while the associative attributes correspond to correlation between different know characteristics and/or correlation between the object and users (col. 11 lines 26-43). Each user profile also has the same types of attributes (i.e. col. 11 line 66-col. 12 line 38). User's feedback is stored in a database of user feedback information (col. 18 lines 10-21). The feedback can be explicit or passive, in which the

passive feedback is inferred data from monitored user's behavior. The monitored behavior data can reveal if a user has seen an object or not (col. 18 lines 23-53). In order to estimate the user's interest for objects that the user has not seen yet, the system estimates and generates new estimated quantities to more closely showing user's preference. This estimation is performed using a regression analysis (col. 19 line 29-col. 22 line 13). The user's feedback keeps constantly updating (col. 22 line 15-col. 23 line 59). Finally, using some additional clustering techniques, the system iteratively searches the most similar objects to a particular user profile P (col. 26 line 1-col. 27 line 39).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Zigmond and Schaffer's invention with Herz' feature of including associated and known attributes of the media to generate new attributes through a regression analysis for the benefit of using all possible parameters to more closely estimate user's preferences and finding him/her content that is better fitted to his/her likings.

Regarding claim 2, the claimed “displaying the viewer selected program and additional programs selected in accordance with the determined viewing” is met as disclosed by Zigmond , wherein ‘viewers change the television channel to tune into channels that are broadcasting programming’ (column 13, lines 12-19) (claimed “viewer selected program”), and ‘advertisements to be shown to a viewer are selected according to designated criteria in combination with information that characterizes the

viewer (claimed "previously determined viewing preferences of the viewer") (column 6, lines 6-9), which are displayed on display [61], Figure 3 and display [58], Figure 4.

Regarding claims 3 and 16, the claimed "the displaying one or more advertisements" is met since 'the user may select one of a plurality of ads' that 'the user is presented with' (Zigmond, column 9, lines 30-31; where in order to receive the plurality of advertisements needs transmission).

Regarding claim 4, the claimed "receiving a plurality of additional programs" is met as discussed in claim 3, since displaying a plurality of advertisements or "additional programs" requires the receiving of the additional programs.

Regarding claim 5, the claimed "selecting one or more of the received additional program in accordance with the previously determined viewing preferences for display to the viewer" is disclosed by Zigmond, wherein 'the user may select one of a plurality of ads' that 'the user is presented with' (column 9, lines 30-31), wherein the 'ads or "additional programs" to be shown to a viewer are selected according to designated criteria in combination with information that characterizes the viewer' (claimed "previously determined viewing preferences of the viewer") (column 6, lines 6-9).

Regarding claims 6 and 17, the claimed "receiving the plurality of programs through one or more broadcast televisions, cable television networks, computer

networks, or telephone networks" is disclosed by Zigmond wherein 'programming is transmitted via any suitable program delivery channel, such as an over-the-air broadcast, a cable provider, a consumer satellite service, telephone lines, via the Internet, or by any other system for transmitting video data' (column 7, lines 17-21).

Regarding claims 7 ,15 and 18, the claimed "receiving the additional programs independently of the TV programs" is met as shown in Zigmond: figure 4, wherein ad source 62 or "additional programs" and programming source [66] or "or TV programs" are each received independently through streams [64] and [52] respectively.

Regarding claims 8 and 19, the claimed "receiving the plurality of TV programs on a first set of TV channels" and "receiving the plurality of additional programs on a second set of TV channels" is disclosed by Zigmond wherein "advertisement stream 64 may be broadcast on a dedicated channel during a late night period of time when relatively few viewers are watching television" TV programs are on a different channel (column 18, lines 10-15).

Regarding claims 9 and 20, Zigmond discloses "multiplexing advertisement stream 64 into video programming feeds 38 and 39," (column 18, lines 20-21) which meets the claimed "receiving the additional programs multiplexed with one or more of the TV programs."

Regarding claim 10, the claimed "storing the received additional programs for subsequent display to the viewer" is met by Zigmond's "a local repository having stored therein a plurality of advertisements, from which an advertisement stream 64 is delivered to the ad insertion device" (column 8, lines 2-7), which is later displayed on display [58].

Regarding claim 11, the claimed "displaying the viewer selected program and additional programs selected in accordance with the previously determined viewing preferences of the viewer from among the stored additional programs" is disclosed by Zigmond. wherein 'viewers change the television channel to tune into channels that are broadcasting programming' (column 13, lines 12-19) (claimed "viewer selected program") and "a device such as advertisement repository 86 of FIG. 5 may be used to store the transmitted advertisements for later selection and display" (column 18, lines 1-11).

Regarding claims 12 and 22, the claimed "receiving a plurality of additional programs including targeting parameters related to the previously determined viewing preferences of the viewer" is disclosed by Zigmond wherein the "plurality of additional programs" are met as discussed in claim 4, and wherein "The viewer and system information may include data provided by the viewer upon initiation of the services

provided by the ad insertion device 80, such as a voluntary survey or questionnaire filled out during the registration process" (column 10, lines 36-48).

Regarding claims 13 and 23, the claimed "targeting parameters include one or more of TV viewing preferences, demographic information, and additional program display schedule information" is disclosed by Zigmond wherein 'advertisements to be shown to a viewer are selected according to designated criteria in combination with information that characterizes the viewer (claimed "viewing preferences"), the content of video programming feed (claimed "additional program display schedule information"), and the geographical location of the household' (claimed "demographic information") (column 6, lines 6-9). Furthermore, "viewer demographic data may be stored in storage location 82, including age, sex, income, preferred language, number of residents, or similar information (claimed "demographic information") (column 10, lines 48-54). Also, "the advertisement parameters include, for example, a description of the content of the advertisement, codes that identify the subject matter of the advertisement, or other mechanisms for characterizing the advertisement so that the advertisement may be displayed to an appropriate segment of the viewing population…the ad selection rules used to match the viewer and system information of storage location 82 or the programming content information of electronic program database 81 with the advertisement parameters associated with the advertisements" (claimed "additional program display schedule information") (column 11, lines 31-49).

Regarding claims 26 and 27, Zigmond, Shaffer and Herz teach wherein performing said regression analysis results in the introduction of one or more additional traits used to improve the determination of the viewer' s preference when an average error value between the selected program and one or predicted programs determined in the regression process does not converge to a given value (Herz: col. 23 lines 11-59).

5. Claims **28 and 29** are rejected under 35 U.S.C. 103(a) as being unpatentable over Zigmond et al. (hereinafter 'Zigmond', Patent No. 6,698,020, of record) in view of Schaffer (Patent No. 7,051,352, of record) in view of Herz (Patent No. 6,029,195) in further view of Maissel et al. (hereinafter 'Maissel', Pub. No. 2003/0088872).

Regarding claim 28, Zigmond teaches a method for displaying a TV program to a viewer, comprising:

receiving a plurality of TV programs, wherein at least some of the received TV programs compete with at least some others of the received TV programs for viewership; allowing the viewer to select one of the plurality of received TV programs for viewing; transmitting a plurality of additional programs (col. 7 lines 13-36);

storing data indicative of the viewer selected TV program and data indicative of at least some others of the TV programs competing with the viewer selected TV program; determining viewing preferences using the stored data indicative of the user selected TV program and data indicative of at least some others of the TV programs competing with the viewer selected TV program, as well as one or more known program

traits (col. 11 lines 11-30; col. 13 lines 5-28, where the EPG description of the programs help to identify the 'type' of user preferred programs);

controlling the programming displayed to the viewer in accordance with the viewer selection and the determined viewing preferences (Fig. 6; col. 17 lines 10-50; col. 6 lines 6-9).

On the other hand, Zigmond does not explicitly teach storing data indicative of TV programs that were not selected along with data indicative of the viewer selected TV programs and determining viewing preferences using both indicative data.

However, in an analogous art, Schaffer teaches a system and method for adaptively recommending content to a viewer where record is kept or stored of what programs have been watched and total or sample of programs not watched (Fig. 3, col. 2 lines 38-67; col. 3 lines 28-42). Furthermore, Schaffer uses this viewing history (programs watched/not-watched and the characteristics they contain) to calculate or determine viewing preferences (Figs. 6 A-C, col. 4 line 20-col. 5 line 19).

Therefore, it would have been obvious to an ordinary skilled in the art at the time of the invention to have modified Zigmond's invention with Schaffer's feature of storing data indicative of non-selected TV programs and determine viewing preferences using this data along with data indicative of selected programs for the benefit of having a more close user's viewing preferences determination by *'differentiating between the features of shows that are liked and those that are not liked…',* Schaffer, col. 2 lines 54-59.

Additionally, Zigmond and Schaffer do not explicitly teach using one or more known program traits and one or more associated program traits, the associated

program traits being combined with other known program traits so as to generate new program traits representative of said viewer's degree of preference of a program according to a regression analysis of the viewing habits of the particular viewer over time to control the program displayed to the viewer.

However, in an analogous art, Herz teaches a system for customized electronic identification of desirable objects that automatically creates both a target profile (profile of the media object) and a user profile (target profile interest, which is the user's interest level on different types of media objects). Using both profiles, the system creates a ordered list of media objects from which the user can select content (At least title; abstract; col. 4 lines 36-47). Herz teaches that the objects to be selected using matching the profile of the objects and the user profile's, can be movies to be watched, a news story of potential to be read, in item to buy, etc (col. 6 lines 16-58). The object profile is composed by three types of attributes: numeric, textual and associative attributes (col. 6 lines 16-58; col. 10 line 29-col. 11 line 49). Numeric and textual attributes are known characteristics of a given content (i.e. title, ratings, release date, etc; col. 11 lines 8-25) while the associative attributes correspond to correlation between different know characteristics and/or correlation between the object and users (col. 11 lines 26-43). Each user profile also has the same types of attributes (i.e. col. 11 line 66-col. 12 line 38). User's feedback is stored in a database of user feedback information (col. 18 lines 10-21). The feedback can be explicit or passive, in which the passive feedback is inferred data from monitored user's behavior. The monitored behavior data can reveal if a user has seen an object or not (col. 18 lines 23-53). In

order to estimate the user's interest for objects that the user has not seen yet, the system estimates and generates new estimated quantities to more closely showing user's preference. This estimation is performed using a regression analysis (col. 19 line 29-col. 22 line 13). The user's feedback keeps constantly updating (col. 22 line 15-col. 23 line 59). Finally, using some additional clustering techniques, the system iteratively searches the most similar objects to a particular user profile P (col. 26 line 1-col. 27 line 39).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Zigmond and Schaffer's invention with Herz' feature of including associated and known attributes of the media to generate new attributes through a regression analysis for the benefit of using all possible parameters to more closely estimate user's preferences and finding him/her content that is better fitted to his/her likings.

Finally, Zigmond, Schaffer and Herz do not explicitly teach monitoring multiple users, identifying whether a viewer profile has been created for said viewer; creating said viewer profile if said viewer profile has not been created for said viewer.

However, in an analogous art, Maissel teaches an intelligent system that is able to monitor and store data of viewed programs for multiple profiles or users ([0062]; [0090]). The system is able to identify if a viewer is a new viewer and creates a profile for him/her. Viewing information and user's information is stored in said profile ([0226]-[0229]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Zigmond, Schaffer and Herz' invention with Maissel's feature of monitoring and storing viewing preference data for multiple viewers for the benefit of expanding and individualizing the system recommendations to all the components of a household.

Regarding claim 29, Zigmond, Schaffer, Herz and Maissel teach further comparing said stored data indicative of said viewer selected TV program and data indicative of at least some others of the TV programs competing with the viewer (Shaffer: Fig. 6 A-C; col. 4 line 20-col. 5 line 19).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to OMAR PARRA whose telephone number is (571)270-1449. The examiner can normally be reached on 9-6 PM (M-F, every other Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on 571-272-7872. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/William Trost/
Supervisory Patent Examiner, Art Unit 2421

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